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ABSTRACT

The British North America Act of 1867 mandates the education of Canadians as a provincial responsibility, although some funding comes from federal sources and municipalities share expenditures with provincial authorities. This paper summarizes a study that investigated effective methods of financing elementary and secondary education in Ontario. The current education funding model, based on a mill rate grant plan, provided a framework for describing, expanding, and revising the system. Several research questions were addressed under the following headings: (1) governance of education; (2) revenue from taxation and federal grants; (3) budgeting; (4) expenditures; and (5) issues for the future. Using a Delphi technique, a sample of 20 knowledgeable individuals were asked to reach a consensus on the "best" future financing scheme through addressing the research questions. Results are summarized under the headings for those questions. In recent years, the funding of Ontario public education has undergone rigorous review. Key issues examined are expansion of the separate (Catholic) and independent school systems, pooling of commercial and industrial assessment, ceiling limits, tax bases, sharing of control, and the provision of equality and equity. Findings indicate the importance of maintaining a proper balance between political and educational motives in decisions, and highlights the need for developing healthy attitudes toward the value of education and schools. Several directions from these findings are presented. Five figures and two tables are appended. (21 references) (MLH)

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# FINANCING ELEMENTARY AND SECONDARY EDUCATION IN ONTARIO: TOWARD THE FUTURE

by

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# FINANCING ELEMENTARY AND SECONDARY EDUCATION IN ONTARIO:

## TOWARD THE FUTURE

The objective of this study was to investigate effective methods of financing elementary and secondary schools in the province of Ontario, Canada. The current education funding model provided a framework from which to describe, expand and revise. Thirteen research questions were addressed under the headings of governance of education, revenue (taxation, provincial grants), budgeting, expenditures, and issues for the future (Lawton, 1987) [1]. Using a Delphi technique a sample of 20 individuals experienced in the practice and study of educational finance were asked to reach a consensus on the "best" future scheme for financing through addressing the research questions. The results are presented and discussed under Lawton's headings. In recent years the funding of public education in Ontario has undergone rigorous review. Key issues examined are the expansion of the separate (Catholic) and independent school systems, pooling of commercial and industrial assessment, ceiling limits, tax bases, sharing of control, and the provision of equality and equity. The findings from this study indicate the importance of a proper balance between political and educational motives in decisions, and highlight the need for more development of healthy public attitudes toward the value of education and schools. Several directions from these findings are presented.

**PURPOSE**

The purpose of the study was to research effective methods of financing elementary and secondary schools in the province of Ontario, Canada. The investigation began with a review of the current funding model (Ontario Ministry of Education, 1989) [2] which is in need of some revision (Brumer, 1990 [3]; Lawton, 1989 [4]).

The main issues addressed were (a) Is the current model too complex? (b) What is the appropriate split of control between provincial and municipal governing bodies? and (c) Are the established expenditure ceilings adequate? By considering these issues and answering thirteen research questions, ideas for funding in the future are presented.

**RESEARCH FRAMEWORK**

Section 93 of the British North America (BNA) Act of 1867 mandates the education of Canadians as a provincial responsibility although some funding comes from federal sources. Also, local municipalities share expenditures with the provincial authorities. Figure 1 displays federal, provincial, and local jurisdictions with respect to

education. From this it is evident that the main impetus for elementary and secondary school financial support is within each province.

Insert Figure 1

The Education Funding Model (Basics)

Historically, a mill rate equalization grant plan has formed the core of elementary and secondary education financing in Ontario. The important components are recognized expenditures (ordinary and extraordinary), average daily enrolment, property assessments, mill rates, and a general consideration of centralized vs decentralized activity, ability, burden, need, effort, and equality and equity (horizontal: meaning "equal treatment of equals", and vertical: meaning "unequal treatment of unequals"). Overall it is a plan consisting of block grants and conditional grants, some of which are equalized and some of which are not. Figure 2 shows the entire provincial grant funding model. There are five categories: basic per pupil block grant, board specific grants, special initiatives grants,

capital funding grant, and additional provincial support for education. The sum of a school board's various operating and capital grants is called the "General Legislative Grant (GLG)".

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Insert Figure 2

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With respect to the detailed calculations of the various grants, each year the Ontario Ministry of Education publishes "Regulation, General Legislative Grants, Public, Separate and Secondary School Boards - made under the Education Act." This contains the definitions and formulas for use by the finance officers with the school boards.

Some of the grant calculations involve the concept of a sharing of expenditures between the province and the municipality; others do not. With respect to the former, a school board applies Ministry-set mill rates to equalized property assessment to raise tax dollars in support of the schools. This local share tax amount is subtracted from expenditure which is recognized by the Ministry as being necessary for the board to provide adequately and this

determines a provincial grant to the board. The category 1 basic per pupil block grant and the category 3 special grant for recognized extraordinary expenditure are examples of grants which are calculated in this manner. Other grant types involve 100% provincial funding (no local sharing), e.g., the French as a first language grant and grants for small schools and small boards (under category 2) and the grant for reduction in class size in grades 1 and 2 (under category 3).

For special initiative grants (category 3) the level of provincial support varies from full funding to programs requiring a local share.

Thus, underlying the grants whereby expenditures are shared is the concept:

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Grant (G) = Recognized expenditure (R) - Local Taxes (T)

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The Ministry defines two types of recognized expenditure:

Recognized Ordinary Expenditure (ROE) - this is expenditure which is common to all school boards, e.g., expenditures for administration, instruction, plant operation and maintenance, non-capital furniture and equipment, non-capital renovations

and repairs, current interest expense and bank charges, and special education expenditures ("built in" per pupil in 1989).

Recognized Extraordinary Expenditure (REE) - this expenditure includes pupil transportation, computer hardware, debt charges, and building costs.

Grant calculations involving ROE and REE are done separately.

The ROE per pupil is the fixed dollar amount per pupil as a standard for all school boards in Ontario which is determined by the province each year. For the category 1 G=R-T calculation, total ROE is the number of pupils of the school board X the provincial recognized ordinary expenditure per pupil. Average Daily Enrolment (A.D.E.) is used for pupil numbers (checked three times per year).

The ROE used in this category 1 grant calculation (recognized for grant purposes by the Ministry) is different for elementary and secondary school students. The amounts are called grant "ceilings", referring to maximum ordinary expenditure recognized. Total recognized ordinary expenditure (ROE) in 1989 was $3,235 per elementary pupil and

$4,122 per secondary pupil (Ontario Ministry of Education, 1989) [2]. A particular school board may calculate its ROE below the provincial ceiling, and it will be entitled to just that amount in the G=R-T calculation.

Locally-raised tax (T) is the second major component in calculations. Each year the province sets uniform mill rates (number of dollars per 1,000 dollars of equalized property assessment to be paid as tax support for public education) for the province. Three pairs of mill rates are used, one with Recognized Ordinary Expenditure (ROE) and two with Recognized Extraordinary Expenditure (REE). Each pair consists of an elementary and a secondary rate. The ROE rates are used in the calculation of the category 1 basic per pupil block grant; the REE rates are used for category 3 calculations. In 1989 the block grant mill rate for elementary and secondary were .005070 and .004184 respectively. All boards have the same equalized mill rate for the same level of recognized ordinary expenditure per pupil.

The local tax revenue to support the schools comes from applying the education mill rates to the applicable

equalized property assessment which exists in each community. Then G=R-T. In 1988, equalization factors were updated to reflect the changes in property valuation that have occurred since 1970. Further, there has been the provision of a better measure of the relative tax capacity at the local level. To better reflect the different residential/commercial assessment revenue generating capacity, residential assessment is now reduced by a discount factor based on the Ontario wide average assessment practice.

Figure 3 shows how the per pupil block provincial grant (category 1) would be determined for three school boards with differing enrolments and property assessment bases (Ontario Ministry of Education, 1989) [2].

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Insert Figure 3

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Again, the category 1 block grant is an example whereby expenditures are locally shared. Other grants such as the French as a Second Language grant of category 3 follow the same basis but an "eligible sum" for FSL (an approved amount per pupil) instead of recognized expenditure per se is used.

The grants for small schools and small boards, and goods and services (category 2) are examples of grants which utilize approved amounts per pupil but they are not on a locally shared basis. Generally they apply to Northern boards. The capital funding grant (category 4) assists boards in financing capital projects, with higher rates of grant paid to school boards that have a more modest assessment base. The boards provide multi-year forecasts on capital expenditure to the Ministry each year.

Many of the grant funding formulas are very complex. The calculation of "day school A.D.E. [Average Daily Enrolment] for grant purposes" itself indicates the calculation complexity involved:

"day school A.D.E. for grant purposes" means the sum of,

(a) the portion of the A.D.E. calculated under section 2 of Ontario Regulation 127/85, (Calculation of Average Daily Enrolment) that is in respect of resident-internal pupils of the board; and

(b) the amount in respect of declining enrolment that is calculated as follows,

E x [(A x C) + (B x D)], correct to two places of

decimals, where,

E = the amount calculated in clause (a),

$A = \left(\frac{\text{ADE 88}}{\text{ADE 89 + ADE.EB.89}} - 1\right)$ correct to four places of decimals,

$B = \left(\frac{\text{ADE 87}}{\text{ADE 88 + ADE.EB.88}} - 1\right)$ correct to four places of decimals,

C = 0.6 if A is greater than zero and E is less than 4,000, or

= 0.3 if A is greater than zero and E is equal to or greater than 14,000, or

$= 0.6 \times \left[1 - \left(\frac{E - 4{,}000}{20{,}000}\right)\right]$, correct to four places of decimals, if A is greater than zero and E is greater than 4,000 but less than 14,000, or

= 1.0 if A is equal to or less than zero,

D = 0.3 if B is greater than zero and E is less than 4,000

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(Ontario Ministry of Education, 1989)[2]

Overall, most of these formulas involve some combination of factors of student enrolment, approved amounts, mill rates, and equalized assessment.

Philosophy Underlying the Model

The mill rate equalization plan is based upon the principles of equal yield for equal effort, i.e., all school

boards with the same mill rate (effort) on their equalized property assessment will have the same financial revenues per pupil (yield) through a combination of local property tax revenues and provincial grants. School boards determine their own budgets and raise their share of costs from local property taxes. The various equalization grants to boards provided by the Ministry in general are unconditional and are made on a block funding basis. This means that school boards can use these funds to meet their own priorities and program delivery systems as long as they maintain provincially determined program standards and adhere to provincial guidelines (Ontario Ministry of Education, 1989)[2].

With boards spending "over ceilings" the Ontario system has become a foundation grant program. Such a program exemplifies the fiscal equity principles of equality of educational opportunity and local tax equity. Figure 4 indicates conceptually how the revenues needed to pay for a foundation unit of education are raised.

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Insert Figure 4

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A beginning assumption is that equal expenditure per pupil provides equal education opportunity per pupil. Each school system A,B, and C, levy a uniform mill rate on an equalized assessment to raise an amount of revenue indicated by T. The government pays in the form of grants, G, the additional monies needed to pay for the foundation program. The tax burden in all systems is equal, but the poor district receives a relatively higher proportion of its revenues from grants. If supplementary revenues, t, in excess of the foundation program are required (for local education priorities above the provincially established base of service) normally they must be raised 100 per cent from local taxation sources. Thus the local mill rate would be set above the provincial uniform one and, with application, the equalization principle is violated because one mill would raise less tax in a poor district than in a wealthy district.

It is the case that if an assessment-rich community wishes to invest more money in their system they are permitted to do so by increasing local mill rates above the level stipulated by provincial regulation. However, the province does not get involved and the school board becomes

accountable to its local taxpayers for the added tax burden.

Throughout, the foundation system provides preservation of local autonomy, initiative, and awareness, and stimulation and control (re increasing the consumption of educational services locally and making it possible for central government to alter provincial expenditures on education in accordance with fiscal capacity).

There are 170 school boards and communities within Ontario with diverse community socio-economic and assessment bases. Lawton (1989)[4] notes that the great majority of school boards now spend over their grant ceilings and, in fact, "ceilings" have become "floors". He confirms that the Ontario plan has become a foundation grant plan (p. 7).

Annual Budgeting Timelines

Each year there are certain dates which are important in budgeting for Ontario elementary and secondary education. The fiscal year for school boards run from January 1st to December 31st whereas the fiscal year for government is from April 1st to March 31st. The boards begin work on their budgets in September/October and have until March to file their budget reports for the succeeding year. The province

sets its own budget in February. In a particular year the "Regulation, General Legislative Grants, Public, Separate and Secondary School Boards" is released in the Spring, usually sometime in March. Included in this are the set mill rates and recognized expenditures for the September 1st to August 31st academic year coming. Below is a budgeting plan for a typical Ontario board:

PLAN FOR BUDGET DEVELOPMENT

| | ACTION | COMPLETION DATE |
|---|---|---|
| 1. | Each department leader meets with department personnel to review the budget process and establish the responsibility of each individual in the preparation of the department submission. | September 30 |
| 2. | Submissions to be submitted to and reviewed with the department leader for acceptability and ranking. | October 31 |
| 3. | Complete departmental submission to be reviewed by department leader with all department personnel for consolidation, further ranking and forwarding to the Superintendent of Business. | November 30 |
| 4. | Superintendent of Business to collate and summarize in proper form all departmental submissions. | December 31 |

5. Analysis of consolidated submissions including recommendations of Executive Council for the purpose of ranking from the perspective of system needs and priorities. January 31

6. Review of consolidated submissions including recommendations of Executive Council by the Board of Trustees including Trustee input and recommendation. March 1

7. Finalization of budget and tax requisitions when grant regulations received. April 30

The Ministry requests school enrolment projections in the Fall (October) and these forecasts are finalized to produce the school board budget by the Spring (April 30th).

Recent Considerations

Many changes in education funding are being contemplated as Ontario society develops. Lawton (1989)[4] states the following:

> What we are seeing is the introduction of restructuring - perestroika - into the public sector. This means, among other things, (1) opening school systems to market forces, (2) using tight-loose management strategies developed in the private sector (central control over goals and evaluation, but local control over operational decisions), (3) deregulation, (4) entrepreneurialism, (5) privatization, and (6) an emphasis on the benefit theory of taxation; that is, the user pays. (p. 4).

He elaborates with a discussion of the five key concerns that affect ability to pay for education - enrolment, property assessment (residential and corporate), personal income, debt, and competing demands, and how these concerns effect provincial and local contributions to education. From 1975 there has been a steady decline in the province's contribution. The provincial share is currently less than 40%. Figure 5 summarizes the specific provincial grant funding for 1989.

Insert Figure 5

Research Questions

From the foregoing funding framework thirteen research questions were formulated under five headings A. to E. (following Lawton, 1987)[1].

A. Governance of Education

1. Is the sharing of power supported by the sharing of costs?
2. Should there be more federal funds coming into education?

B. Revenue

a) Taxation

1. Is property the ideal basis for tax?
2. What are the implications of pooled industrial and commercial assessment?

b) Provincial Grants

1. How adequate are the current ceilings?
2. Are the funding formulas too complex?

C. Budgeting

1. Are decisions to spend politically or need driven?

D. Expenditures

1. Does more money translate to better education?
2. Are there ways of cutting costs through the sharing of services?
3. What are the implications of a regular audit of school board expenditures?

E. Issues for the Future

1. What effects will the aging population have on the costs of education?
2. How will the funding model evolve to accommodate the increasing demands on the school system?

3. What attitudinal changes are necessary?

## METHOD

A sample of twenty individuals experienced in the practice and study of educational finance was drawn from Ontario. These people were involved in graduate courses in finance or were working for the Ministry of Education.

Using a modified Delphi technique these persons were asked to consider trends in society and education, and then reach consensus on an ideal scheme for financing elementary and secondary education in the future through addressing the above research questions.

### The Delphi Technique

The Delphi technique is a method for forecasting future events. It was originally developed at the Rand Corporation by Dalkey and Helmer in 1953 (Berghofer, 1971)[6].

The technique involves soliciting opinions on a particular issue of the future from a group of individuals who are very knowledgeable about the issue. First, individual opinions are collected. Then, all these opinions are shared with the group. Discussion proceeds prior to a

second round of obtaining individual opinions on the same issue (the hope is for convergence of opinion). In three iterations (at least) of collecting the individual opinions, discussion, and collecting opinions again, the respondents revise their earlier views, until convergence of opinion on the future event is reached. The end product is a consensus of experts.

Studies have revealed that the technique is reliable in forecasting events quite accurately (Freeman, 1979[7]; Hill and Goodale, 1981[8]) and in achieving convergence of opinion (Uhl, 1971[9]). Laughlin and Moore (1979)[10] found that the technique was effective "not only for obtaining a consensus on objectives but also for elucidating areas where there is no apparent consensus" (p.101).

In this study the twenty respondents performed three iterations of the technique in a six hour session. Consensus on the answers to the research questions was reached after this time.

**RESULTS AND DISCUSSION**

Generally the respondents agreed that the current education funding model needs revision particularly in that there needs to be increased input in decision making from local municipalities.

There was consensus on the following points:

a) there is need for some simplification of the present funding system;

b) there is too much centralization of control;

c) there should be a reassessment of the relative proportions of provincial and local funding with a view to raising ceilings.

Following are specific responses to the research questions presented under Lawton's five headings (Table I indicates degree of consensus):

A. Governance of Education

1. Is the sharing of power supported by the sharing of costs?

Response:

The current trend of declining provincial grants and escalating local share from taxation will continue if

measures are not put in place to halt it. If the provincial contribution continues to decline, the centralized control of education may become more of an issue.

Discussion:

Taylor (1985) [11] describes a certain degree of mutual mistrust that exists between the school boards and the provincial government. He says:

> The province is fearful of letting the school boards have too much autonomy because they feel that, left alone, the various school boards will increase, rather than bridge, disparities and therefore jeopardize their policy of equal education throughout Ontario (p. 31).

A goal has been to have the province and the local boards share education costs in a 60%/40% split respectively. However, in recent years the provincial government has been practicing devolution whereby there is a greater delegation of fiscal decisions on distributed funds to local boards. This distances the government from politically unpopular choices concerning the use of scarce resources for education but it creates more politics and costs for individual communities

(Jefferson, 1989, p. 253) [12].

What is required is a balance between preserving local autonomy and exercising centralized control such that the principles of equal educational opportunity and equal tax burden are maintained as much as possible.

2. Should there be more federal funds coming into education?

Response:

There should be no further influx of federal funds, in the interest of maintaining provincial control.

Discussion:

Even though education is a provincial responsibility, the federal government does share in the financing of education in two major ways:

> First, it is directly responsible for providing educational services to the following groups: native students residing in both the provinces and the territories; children resident in the non-provincial parts of Canada, that is, the territories and Arctic islands; children of armed forces personnel both at home and abroad; and inmates of penitentiaries.

> The federal government is also involved in financing education because of the nature of Canadian federalism. Since Confederation, federal governments have made various fiscal arrangements or have entered into various agreements to make transfer payments to the provinces out of the general federal revenues (Dibski, 1987, p. 68) [13].

Both Dibski and Brown (1985a) [14] express concern about the growth in interprovincial inequalities in levels of educational funding and see revised federal-provincial fiscal arrangements as important.

The respondents felt that at this time, particularly with Canada's constitution being reexamined (i.e., the Meech Lake Accord) and with debate on a federal Government Sales Tax (GST), that the current situation of federal input should be maintained but not upscaled, in the interests of provincial autonomy.

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Insert Table I

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B. Revenue

a) Taxation

1. Is property the ideal basis for tax?

Response:

In addition to property taxes, a wealth tax, increased rental of facilities, year round travel surcharges, and increased personal income taxes should be explored. With respect to the last item Lawton (1989) [4] states that increases in personal income, like increases in assessment, are not equally spread across the province (p.6). Other suggestions were an educational voucher scheme, educational bonds, special lotteries to provide funds (or a tax on lottery tickets to support education), and a levy on industry in return for the education of the skilled workers it employs.

In the response to this research question a number of other ideas pertaining to new sources of revenue generally were presented. These included using retirement gratuity monies and directing into education the money from wealthy immigrants to Canada (e.g., from Hong Kong).

2. What are the implications of pooled assessment?

Response:

The current effort to introduce a new system of

industrial assessments should be continued. This may help to more equitably distribute the funds across the public and separate school system.

Discussion:

In 1989 Bill 64 was introduced into the Ontario Legislature. This legislation provides that separate school boards will receive a fairer share of the education taxes paid by the businesses and factories in each community. The plan will be phased in over a six year period. Basically, it provides for revenues from businesses, industries, and telephone and telegraph payments to be shared between the public and separate systems on the basis of their respective residential and farm assessments. This will increase taxation revenue for the separate systems and create a loss of revenue for the public systems. When revenues from taxes decrease provincial grants increase; when revenue from taxes increase, provincial grants decrease. Therefore, in part at least, losses and gains tend to balance themselves out. In cases where the loss to a public system does not balance out with normal grants, the

government has set aside special grants to prevent any real loss. Before this new legislation, 80% of the commercial and industrial assessment was going to the public school boards. Despite the claim by some public school ratepayers that they are being forced to pay for the extension of funding to separate schools, the new pooling scheme does create fairness and balance. Morris (1989) [15] provides background to the plan.

b) Provincial Grants

1. How adequate are the current ceilings?

Response:

The ceilings are too low. Data shows that almost all boards in the province spend above the provincially-determined ceilings.

Discussion:

Several authors (e.g., Brumer, 1990 [3]; Dibski, 1987 [13]; Lawton, 1989 [4]) confirm this. Most Ontario boards exceed provincial grant ceilings in both panels and have done so, for several years. Ignoring assessment inequities, provincial grant ceilings (or "floors") should be established to more closely relate

to actual costs. This upward adjustment should allow boards of lesser wealth (and perhaps some inferior standards of education), an opportunity to improve their standard of educational delivery, knowing the Province is sharing in the additional cost.

2. Are the funding formulas too complex?

Response:

The funding formulas are too complex. They should be simplified and explained better.

Discussion:

As mentioned earlier in this article the current formulas in the GLG documents are very complex. Ontario should strive towards a more simplified structure in the interest of greater understanding and support.

C. Budgeting

1. Are decisions to spend politically or need driven?

Response:

The decisions to spend are more politically driven than they should be, thereby not meeting the educational needs of the community adequately.

Discussion:

Andrew-Cotter and Thom (1987) [16] describe the influence of politicians.

> Declining enrolments have created other stresses on the educational system; it is much easier to grow than to shrink. In times of growth, problems are solved by throwing money at the problem. This does not always provide a good solution but it is easier for the clients to understand than the reverse which is so often true in the declining phase. Taking away things that parents, students and teachers have grown to accept as normal is not a popular political move. One must never forget that the predominant factor in educational finance is the politician acting primarily at the provincial and school board levels. They are motivated as heavily by the vote as by what is educationally and administratively sound (p. 39).

In the future, local plebescite voting on educational issues (as in the U.S.) may be a solution.

D. Expenditures

Does more money translate to better education?

Response:

More money does not necessarily mean better education. It is only through a careful application to accurately assessed needs that quality education can be achieved.

Discussion:

Undoubtedly increased payments to local municipalities by either the federal or provincial governments increases the community's fiscal capacity. But as Hanushek (1986) [17] states there appears to be no strong relationship between school expenditures and student performance (p. 1162). Decision making must be sharpened and province-wide testing of students could provide a guage as to expenditure effectiveness.

2. Are there ways of cutting costs through the sharing of services?

Response:

Yes, there are ways. Some suggestions are the formation of unified school boards, the sharing of transportation costs by separate and public systems, and providing joint school and community centre services.

Discussion:

Andrew-Cotter and Thom (1987) [16] and Lawton (1989) [4] discuss these approaches. The former suggest that unified boards could reduce costs by the creation of one support service, one administration, and one board; and

within a board schools could be instituted with parent advisory councils to develop their own unique programs (p. 43). One caution is that sharing services might seem to be a way to reduce costs but it may result in an increase in problems because of several jurisdictions being involved.

Several other ideas on cost-saving emerged. These included instituting provincial collective bargaining and one salary grid, cutting back on special education, and raising the provincial share of funding to 80%.

Finally, there is a feeling that the timing for transfer of general legislative grants from the Province and the transfer of local property taxes from municipalities does not suitably relate to the financing needs of school boards (Macdonald Commission, 1985) [5]. Since school boards incur significant expenditures in the months of January, February and March before any significant transfers from the two major revenue sources commence in March, there are significant borrowing costs. A suggestion is that provincial transfers be adjusted to more accurately reflect the incurrence of

school boards' expenditures.

3. What are the implications of a regular audit of school board expenditures?

Response:

All but two of the respondents supported regular audits. All agreed that cost was a significant factor, but not all agreed that the benefits of the audits would justify that cost.

Discussion:

In October 1989 two Ontario school boards became the first-ever to be given an audit by the provincial auditor's office. School boards are a transfer payment program of considerable dollars and the audit was to reveal whether the boards have done what they promised to do with the provincial funding received. These audits take several months and are costly. The majority of the respondents supported them as a regular occurrence.

E. Issues for the Future

1. What effects will the aging population have on the costs of education?

Response:

There will be several effects. The political decisions made by this older median population will reflect their attitudes and philosophies. It will become increasingly difficult for this group to accept paying school costs when their own offspring have completed their formal education. Finally, the vote will be to direct more government funds into health care and welfare schemes to cater to this older majority.

Discussion:

Brown (1985b) [28] mentions that elementary and secondary education is the most age-related of all public services. Further, he states that changes in real educational need, real educational burden and political attitudes toward spending for education are greatly influenced by the age structure of the population. Table II displays important population and enrolment trends for Ontario, 1961 to 2001.

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Insert Table II

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These trends, together with the fact that there continues to be deteriorating health of provincial economies, signals the possibility of much less money for education in the future.

2. How will the funding model evolve to accommodate the increasing demands on the school system?

Response:

The respondents agreed that the model must be simplified and that more input into decisions must be given to local ratepayers. We may see a significant reduction in provincial funding and increased local taxation. Just what specific form the future model will take is uncertain but hopefully planners will be assisted by the ideas presented from this research.

Discussion:

For this question many additional ideas emerged. Among them were the development of healthy public attitudes toward schools and education; a fair system of provincial and local responsibility; continuing exploration of new tax bases and sources of revenue

generally; provision of education to French students; and the development of an independent schools system.

Many of the above issues are highlighted in the literature, e.g., Dibski (1987) [13]. Discussions from the Select Committee on Education (1989) are relevant. Bezeau (1989) [20] debates public financial support for private schools and the effects of an aging population ("dependency in the Canadian population"). He emphasizes that the former can be obtained without an increase in public control (p. 562). Further, he advocates the school of the future as a community resource available to the citizens of all ages who provide support.

Brumer (1990)[3] describes some coming changes under four categories - transportation, continuing education, average daily enrolment and goods and services (p. 19). The bigger school boards will lose provincial revenue because many of these changes are designed to bring service in line with actual need and Northern boards specifically will be affected by the goods and services revisions.

**CONCLUSIONS**

The financing of elementary and secondary education in Ontario has been undergoing rigorous review. Such principles as equal educational opportunity and equal yield for equal effort will be retained but others could be modified. For instance, direction is toward opening education systems to market forces and placing more onus on municipalities to pay the costs of education. Thus alternative taxation schemes are being explored. Further, provincial support for independent schools has led to a rethinking of what constitutes "public" education. The Macdonald Commission and the Select Committee on Education represent the beginning of new creative ideas.

The complex society is creating a situation in which it is difficult to predict the exact form that the future funding model will take. In recent years there have been some significant developments within the province - full funding of separate (Catholic) schools, communities declaring themselves "English only", and the introduction of multi-faith religious programs in public schools. At the federal

level there have been the Meech Lake Accord (re Quebec being afforded a distinct identity), Free Trade, and a federal Government Sales Tax (GST) plan. These things, in the broader context of an aging population, have contributed to new religious, language, ethnic and economic influences which ultimately could impact on schools.

The recent revision of the funding model by the Ontario Ministry of Education is an effort to increase clarity, to simplify, and to increase allocation fairness. However, more needs to be done.

Several things are clear and these were confirmed in this research: there is a desire by local municipalities for more input on decisions; there is a wish for higher "ceilings"; and the growing multi-cultural society means that there will be increasing pressures to develop other school systems. Actual educational needs and new sources of revenue to meet these needs must be explored. Future research should address these themes in detail. The Delphi technique is one of several methodologies which could be useful.

At least what will be required for future effectiveness and efficiency are healthy public attitudes toward schools,

increased cooperation between the Ministry of Education and school boards and excellent systems of long range planning.

**References**

1. Lawton, Stephen B. The Price of Quality: The Public Finance of Elementary and Secondary Education in Canada. Toronto, Ont.: Canadian Education Association, 1987.

2. Ontario Ministry of Education. Education Funding in Ontario (The General Legislative Grants Regulations, 1989 including The Funding Model). Toronto, Ont., March, 1989.

3. Brumer, Leon. "Financing Education in Ontario - New Directions. Education Today, 2, no. 1 (January/February, 1990), 17-19.

4. Lawton, Stephen B. "Who's Running the Shop? The Revolution in Ontario School Finances." Orbit, 20, no. 3 (October, 1989), 4-7.

5. Ontario Ministry of Education. Report of the Commission on the Financing of Elementary and Secondary Education in Ontario. (Macdonald Commission). Toronto, Ont.: The Queen's Printer, 1985.

6. Berghofer, D.E. "An Application of the Delphi Technique to Educational Planning." The Canadian Administrator, 1971, 10, no. 6, pp. 25-28.

7. Freeman, A., "The Future of Future Studies." CCEA Newsletter, 1979, 3, no. 7, pp. 3-5.

8. Hill, R.B., and Goodale, F. "The Delphi Predictions of Pathology Chairmen: A Six-year Retrospective View. Journal of Medical Education, 1981, 56, pp. 537-46.

9. Uhl, N.P. Encouraging Convergence of Opinion, Through the Use of Delphi Technique, in the Process of Identifying an Institution's Goals (Report No. PR-71-2). Princeton, N.J.: Educational Testing Service, February, 1971.

10. Laughlin, K.G., and Moore, L.F. "Using Delphi to Achieve Congruent Objectives and Activities in a Pediatrics Department. Journal of Medical Education, 1979, 54, pp. 101-06.

11. Taylor, Mark. "An Assessment of the Educational Property Tax." Comment on Education, 15, no. 4 (April, 1985), pp. 24-31.

12. Jefferson, Anne L. "Financing Public Education: The Canadian Way." Economics of Education Review, 8, no. 3 (1989), pp. 247-53.

13. Dibski, Dennis. "Financing Education." In Social Change and Education in Canada. R. Ghosh and D. Ray (eds). Toronto, Ont.: Harcourt Brace Jovanovich, 1987.

14. Brown, Wilfred J. "Reemergence of Inequalities in Education Finance Among the Provinces of Canada." Summary of a talk by Wilfred J. Brown at the American Education Finance Association Annual Conference, Phoenix, Arizona, April 13, 1985a.

15. Morris, J.H. "Pooling of Commercial and Industrial Assessment." Education Today, September/October, 1989, pp. 14-15.

16. Andrew-Cotter, Paul, and Thom, Douglas J. "Financing Education: Some Models for the 1980's." Comment on Education, 18, no. 1 (September, 1987), 12-16.

17. Hanushek, E.A. "The Economics of Schooling: Production and Efficiency in Public Schools." Journal of Economic Literature (September, 1986), 1141-77.

18. Brown, Wilfred J. "Problems and Issues in Education Finance Across Canada." Notes prepared for guest lecture, Educational Finance class (D.J.Thom), Thunder Bay, Ontario, July 23, 1985b.

19. Ontario. Legislative Select Committee on Education (report). Toronto, Ont., 1989.

20. Bezeau, Lawrence M. "The Financing of Canadian Education." In Contemporary Educational Issues: The Canadian Mosaic. L.L. Stewin and S. McCann (eds.) Toronto, Ont.: Copp Clark Pitman, 1987.

21. Awender, M.A., and Nease, A.S. "Government Control of Education." In Contemporary Educational Issues: The Canadian Mosaic. Toronto, Ont.: Copp Clark Pitman, 1987.

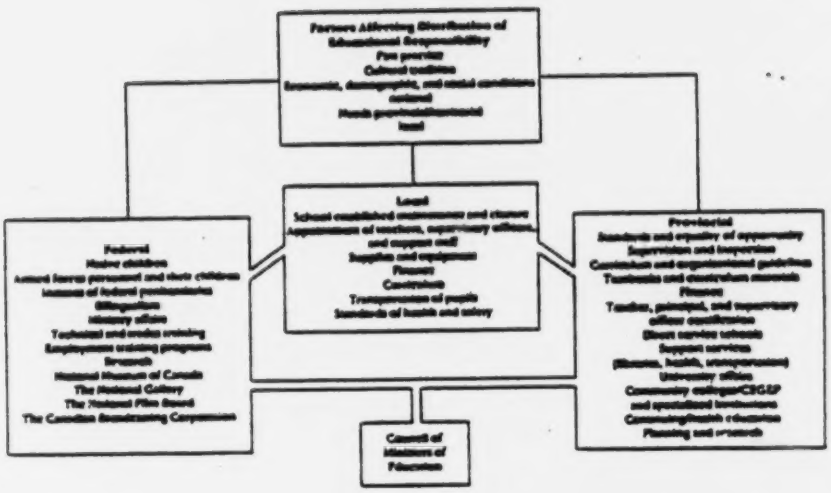

FIGURE 1

FEDERAL, PROVINCIAL, AND LOCAL RESPONSIBILITIES AND INVOLVEMENT IN EDUCATION

From "Government Control of Education" by M.A. Awender and A.S. Nease, 1987, Contemporary Educational Issues: The Canadian Mosaic, p. 555. Copyright, 1987 by Copp Clark Pitman, Toronto, Ont.[21]

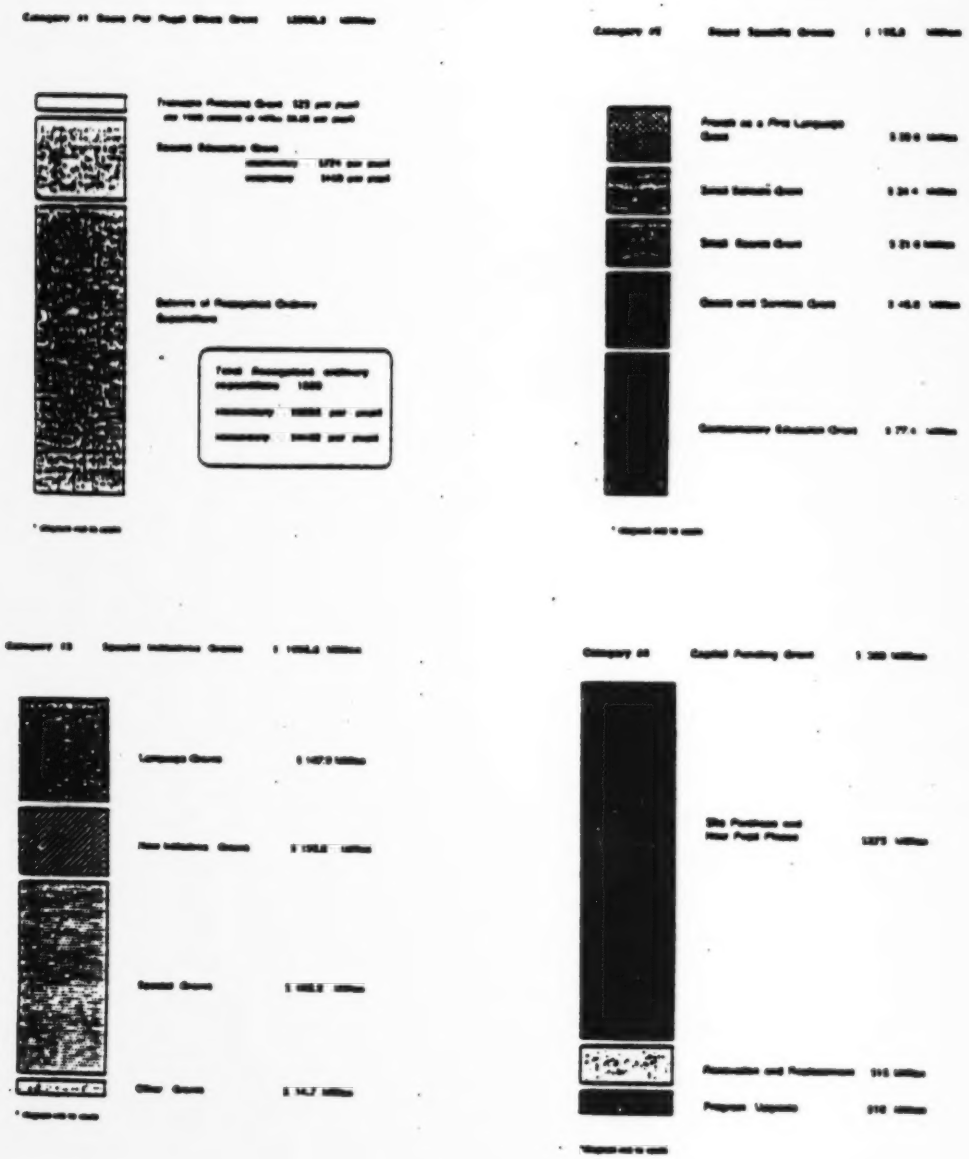

FIGURE 2

THE ONTARIO EDUCATION FUNDING MODEL 1989

| | | BOARD A | BOARD B | BOARD C |
|---|---|---|---|---|
| 1. | RECOGNIZED ORDINARY EXPENDITURE PER PUPIL | $3,500 | $3, 500 | $3,500 |
| 2. | EQUALIZED PROVINCIAL MILL RATE PER $1,000 | 4.5 | 4.5 | 4.5 |
| 3. | ENROLMENT - # OF PUPILS IN SCHOOL BOARD | 1000 | 2000 | 2000 |
| 4. | BOARDS EQUALIZED ASSESSMENT | $200,000,000 | $200,000,000 | $1,000,000,000 |
| 5. | TOTAL RECOGNIZED ORDINARY EXPENDITURE (1X3) | $ 3,500,000 | $ 7,000,000 | $ 7,000,000 |
| 6. | YIELD FROM PROVINCIAL EQUALIZED MILL RATE APPLIED TO BOARDS EQUALIZED ASSESSMENT (2X4) | $ 900,000 | $ 900,000 | $ 4,500,000 |
| 7. | PROVINCIAL GRANT (5-6) | $ 2,600,000 | $ 6,100,000 | $ 2,500,000 |

FIGURE 3

CALCULATION OF THE BASIC PER PUPIL BLOCK GRANT

From Education Funding in Ontario by Ontario Ministry of Education, Toronto, Ont., March, 1989 [2].

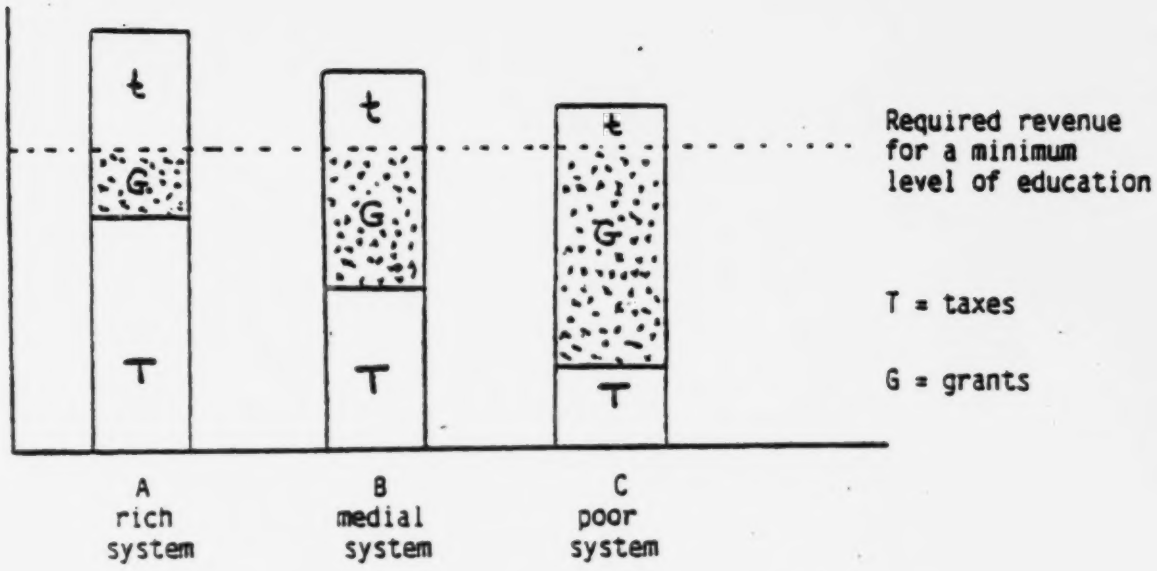


FIGURE 4

REVENUE FOR A FOUNDATION UNIT OF EDUCATION

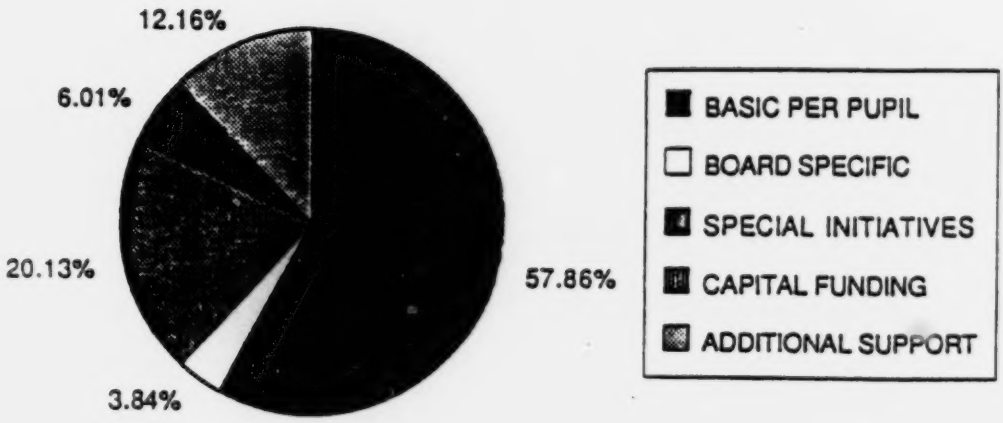


FIGURE 5

1989 PROVINCIAL GRANT FUNDING FOR EDUCATION

(developed from FIGURE 2)

| Question | Iteration 1 | Iteration 2 | Iteration 3 (Final) |
|---|---|---|---|
| A. Governance of Education | | | |
| 1. Is the sharing of power supported by the sharing of costs? | 70% | 85% | 100% |
| 2. Should there be more federal funds coming into education? | 80% | 95% | 100% |
| B. Revenue | | | |
| (a) Taxation | | | |
| 1. Is property the ideal basis for tax? | 55% | 90% | 100% |
| 2. What are the implications of pooled industrial and commercial assessment? | 90% | 100% | 100% |
| (b) Provincial Grants | | | |
| 1. How adequate are the current ceilings? | 100% | ----- | 100% |
| 2. Are the funding formulas too complex? | 90% | 95% | 100% |
| C. Budgeting | | | |
| 1. Are decisions to spend politically or need driven? | 90% | 100% | 100% |
| D. Expenditures | | | |
| 1. Does more money translate to better education? | 50% | 80% | 100% |
| 2. Are there ways of cutting costs through the sharing of services? | 80% | 90% | 100% |
| 3. What are the implications of a regular audit of school board expenditures? | 60% | 90% | * 100% |
| E. Issues for the Future | | | |
| 1. What effects will the aging population have on the costs of education? | 55% | 80% | 100% |
| 2. How will the funding model evolve to accommodate the increasing demands on the school system? | 60% | 75% | 100% |
| 3. What attitudinal changes are necessary? | 85% | 95% | 100% |

* 2 RESPONDENTS HESITANT

TABLE I

DEGREE OF RESPONDENT CONSENSUS ON ANSWERS TO RESEARCH QUESTIONS

| Age Groups | 1961 | 1971 | 1981 | 1984[p] | 1991[e] | 2001[e] |
|---|---|---|---|---|---|---|
| ONTARIO | | | | | | |
| Population | | | | | | |
| 0 - 19 | 2,444,700 | 2,921,900 | 2,695,700 | 2,600,400 | 2,787,600 | 2,820,900 |
| 20 - 44 | 2,136,000 | 2,662,200 | 3,318,900 | 3,579,900 | 4,092,800 | 4,128,200 |
| 45 - 64 | 1,147,400 | 1,474,500 | 1,742,100 | 1,819,900 | 1,919,200 | 2,511,700 |
| 65 and over | 508,000 | 644,500 | 868,000 | 937,200 | 1,108,600 | 1,292,500 |
| Total | 6,236,100 | 7,703,100 | 8,624,700 | 8,937,400 | 9,908,200 | 10,753,300 |
| Percentage Distribution | | | | | | |
| 0 - 19 | 39.20% | 37.93% | 31.26% | 29.10% | 28.13% | 26.23% |
| 20 - 64 | 52.55 | 53.70 | 58.68 | 60.42 | 60.68 | 61.75 |
| 65 and over | 8.15 | 8.37 | 10.06 | 10.48 | 11.19 | 12.02 |
| Total | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% |
| Dependency Ratio* | 89.93 | 86.21 | 70.41 | 65.51 | 64.81 | 61.95 |

[e]estimate

[p]preliminary postcensal estimate

*Ratio of population in the 0 - 19 and 65 and over age groups to population in the 20-64 age group, expressed as a percentage.

TABLE II

THE CHANGING AGE STRUCTURE OF THE POPULATION,
ONTARIO, 1961 to 2001

From "Problems and Issues in Education Finance Across Canada"
by Wilfred J. Brown, Thunder Bay, Ont., July, 1985 [18].